

**INTERNATIONAL APPLICATION
UNDER THE
PATENT COOPERATION TREATY
REQUEST**

THE UNDERSIGNED REQUESTS THAT THE PRESENT
INTERNATIONAL APPLICATION BE PROCESSED
ACCORDING TO THE PATENT COOPERATION TREATY

(The following is to be filed with the receiving Office)
INTERNATIONAL APPLICATION No: 7/US 88/02139

INTERNATIONAL
FILING DATE:

24 JUN 1988

PCT INTERNATIONAL
APPLICATION RO/US

(Stamp)
Name of receiving Office and PCT International Application

Applicant's or Agent's File Reference 0627.1226604⁴
(indicated by applicant if desired)

Box No. I TITLE OF INVENTION

TREATMENT OF AUTOIMMUNE DISEASES BY ORAL ADMINISTRATION OF AUTOANTIGENS

Box No. II APPLICANT (WHETHER OR NOT ALSO INVENTOR); DESIGNATED STATES FOR WHICH HE/SHE/IT IS APPLICANT. Use this box for indicating the applicant or, if there are several applicants, one of them. If more than one person (includes, where applicable, a legal entity) is involved, continue in Box No. III.

The person identified in this box is (check one only): ☐ applicant and inventor* ☒ applicant only

Name and address:**

BRIGHAM AND WOMEN'S HOSPITAL
75 Francis Street
Boston, Massachusetts 02115
United States of America

Telephone number:
(including area code)

Telegraphic address:

Teleprinter address:

Country of nationality: US

Country of residence:***

The person identified in this box is *applicant* for the purposes of (check one only):

☐ all designated States ☒ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the "Supplemental Box"

Box No. III FURTHER APPLICANTS, IF ANY; (FURTHER) INVENTORS, IF ANY; DESIGNATED STATES FOR WHICH THEY ARE APPLICANTS (IF APPLICABLE). A separate sub-box has to be filled in in respect of each person (includes, where applicable, a legal entity). If the following two sub-boxes are insufficient, continue in the "Supplemental Box," (giving there for each additional person the same indications as those requested in the following two sub-boxes) or by using a "continuation sheet."

The person identified in this sub-box is (check one only): ☒ applicant and inventor* ☐ applicant only ☐ inventor only*

Name and address:**

WEINER, Howard L.
114 Somerset Road
Brookline, Massachusetts 02146
United States of America

If the person identified in this sub-box is *applicant* (or *applicant and inventor*), indicate also:

Country of nationality: US

Country of residence:***

and whether that person is *applicant* for the purposes of (check one only):

☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the "Supplemental Box"

The person identified in this sub-box is (check one only): ☒ applicant and inventor* ☐ applicant only ☐ inventor only*

Name and address:**

HAFNER, David A.
110 Forrest Avenue
Newton, Massachusetts 02165
United States of America

If the person identified in this sub-box is *applicant* (or *applicant and inventor*), indicate also:

Country of nationality: US

Country of residence:***

and whether that person is *applicant* for the purposes of (check one only):

☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the "Supplemental Box"

* If the person indicated as "applicant and inventor" or as "inventor only" is not an *inventor* for the purposes of all the designated States, give the necessary indications in the "Supplemental box."

** Indicate the name of a natural person by giving his/her family name first followed by the given name(s). Indicate the name of a legal entity by its full official designation. In the address, include both the postal code (if any) and the country (name).

*** If residence is not indicated, it will be assumed that the country of residence is the same as the country indicated in the address.

Box No. IV AGENT (IF ANY) OR COMMON REPRESENTATIVE (IF ANY); ADDRESS FOR NOTIFICATIONS (IN CERTAIN CASES) A common representative may be appointed only if there are several applicants and if no agent is or has been appointed; the common representative must be one of the applicants.

The following person (includes, where applicable, a legal entity) is hereby/has been appointed as agent or common representative to act on behalf of the applicant(s) before the competent International Authorities:

Name and address, including postal code and country (if the space below is used instead for an address for notifications*, check here ☐):

FOX, Samuel L.

SAIDMAN, STERNE, KESSLER & GOLDSTEIN

1225 Connecticut Avenue, N.W., Suite 300

Washington, D.C. 20036, United States of America

Telephone number:
(including area code)

(202)

Telegraphic address:

PRELEX

Teleprinter address:

248636

833-7533

Box No. V DESIGNATION OF STATES; POSSIBLE CHOICE OF EUROPEAN PATENT; POSSIBLE CHOICES OF CERTAIN KINDS OF PROTECTION OR TREATMENT. Where the name of a State is followed by two check boxes, either or both of the boxes may be checked. The checking of both boxes results in both a European and a national patent being requested for the same State. Designation of Switzerland includes designation of Liechtenstein (and vice-versa).

The following States are hereby designated:*** European Patent National Patent (if other national title or treatment desired, specify)**

AT	Austria	<input type="checkbox"/>	<input type="checkbox"/>	**
AU	Australia	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
BB	Barbados	<input type="checkbox"/>	<input type="checkbox"/>	**
BE	Belgium	<input type="checkbox"/>	<input type="checkbox"/>	[no national title available]
BG	Bulgaria	<input type="checkbox"/>	<input type="checkbox"/>	**
BR	Brazil	<input type="checkbox"/>	<input type="checkbox"/>	**
Ch and LI	Switzerland and Liechtenstein	<input type="checkbox"/>	<input type="checkbox"/>	**
DE	Federal Republic of Germany	<input type="checkbox"/>	<input type="checkbox"/>	**
DK	Denmark	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
FI	Finland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
FR	France	<input type="checkbox"/>	<input type="checkbox"/>	[no national title available]
GB	United Kingdom	<input type="checkbox"/>	<input type="checkbox"/>	**
HU	Hungary	<input type="checkbox"/>	<input type="checkbox"/>	**
IT	Italy	<input type="checkbox"/>	<input type="checkbox"/>	[no national title available]
JP	Japan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
KP	Democratic People's Republic of Korea	<input type="checkbox"/>	<input type="checkbox"/>	**
KR	Republic of Korea	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
LK	Sri Lanka	<input type="checkbox"/>	<input type="checkbox"/>	**
LU	Luxembourg	<input type="checkbox"/>	<input type="checkbox"/>	**
MC	Monaco	<input type="checkbox"/>	<input type="checkbox"/>	**
MG	Madagascar	<input type="checkbox"/>	<input type="checkbox"/>	**
MW	Malawi	<input type="checkbox"/>	<input type="checkbox"/>	**
NL	Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	**
NO	Norway	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**
RO	Romania	<input type="checkbox"/>	<input type="checkbox"/>	**
SD	Sudan	<input type="checkbox"/>	<input type="checkbox"/>	**
SE	Sweden	<input type="checkbox"/>	<input type="checkbox"/>	**
SU	Soviet Union	<input type="checkbox"/>	<input type="checkbox"/>	**
US	United States of America	<input type="checkbox"/>	<input checked="" type="checkbox"/>	**.....Continuation-In-Part.....

EP all PCT Contracting States
for which a European patent
may be requested



these States are those listed above whose names are preceded by the codes
AT, BE, CH and LI, DE, FR, GB, IT, LU, NL and SE

OA OAPI (Benin, Cameroon, Central African Republic, Chad,
Congo, Gabon, Mali, Mauritania, Senegal, Togo)



OAPI Patent
(if other OAPI title
desired, specify)**

Space reserved for designating countries which become party to the PCT after the issuance of the present form (February 26, 1987)

- * An address for the sending of notifications for a sole applicant or for a common representative may be indicated if no agent has been appointed to represent the applicant or, if there are several applicants, all of them
- ** If another kind of protection or a title of addition is desired or if, in the United States of America, treatment as a continuation or a continuation in part is desired, indicate according to the instructions given in the Notes to Box No. V
- *** The applicant's choice of the order of the designations may be indicated by checking the boxes of the designated States with sequential arabic numerals (see also the Notes to Box No. V)
- **** When this box is checked, none of the other boxes in the column "European patent" should be checked

Supplemental Box. Use this box in the following cases:

- (i) if more than three persons are involved as applicants and/or inventors; in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III;
- (ii) if, in Box No. II or any of the sub-boxes of Box No. III, the indication "the States indicated in the 'Supplemental Box,' is checked; in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the country or countries (or EP or OA, if applicable) for the purposes of which he/she/it is applicant;
- (iii) if, in Box No. II or any of the sub-boxes of Box No. III, a person indicated as "applicant and inventor" or "inventor only" is not inventor for the purposes of all designated States or for the purposes of the United States of America; in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor and, next to such name, the country or countries (or EP or OA, if applicable) for the purposes of which the named person is inventor;
- (iv) if there is more than one agent and their addresses are not the same; in such case, write "Continuation of Box No. IV" and indicate for each additional agent the same type of information as required in Box No. IV;
- (v) if, in Box No. V, the name of any country (or OAPI) is accompanied by the indication "patent of addition," "certificate of addition," or "inventor's certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "Continuation" or "Continuation in part"; in such case, write "Continuation of Box No. V" and the name of each country involved (or OAPI), and after the name of each such country (or OAPI), the number of the parent title or parent application and the date of grant of parent title or filing of parent application;
- (vi) if there are more than three earlier applications whose priority is claimed; in such case, indicate "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI;
- (vii) if, in any of the Boxes, the space is insufficient to furnish all the information; in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient.
- (viii) if the applicant intends to claim, in respect of any designated Office, the benefit of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty; in such case, write "Statement Concerning Non-prejudicial Disclosures or Exceptions to Lack of Novelty" and furnish that statement below.

BOX IV - CONTINUATION

SAIDMAN, Perry J.; STERNE, Robert G.; KESSLER, Edward J.; GOLDSTEIN, Jorge A.
all of the above are members of the firm of

SAIDMAN, STERNE, KESSLER & GOLDSTEIN
1225 Connecticut Avenue, N.W., Suite 300
Washington, D.C. 20036
United States of America

BOX V - CONTINUATION

US CONTINUATION-IN-PART - Parent Application No. 065,734
Filed: 24 June 1987 (24,06,87)

If this Supplemental Box is not used, this sheet need not be included in the Request.

Box No. VI PRIORITY CLAIM

(IF ANY). The priority of the following earlier application(s) is hereby claimed:

Country (country in which was filed if national application; one of the countries for which it was filed if regional or international application)

Filing Date
(day, month, year)

Application No.

Office of Filing (fill in only if the earlier application is an international application or a regional application)

(1)

US

24 June 1987

065,734

(2)

(3)

(Letter codes may be used to indicate country and/or Office of filing)

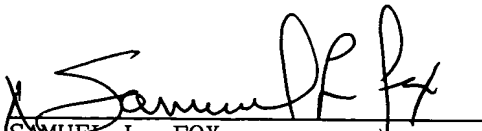
When the earlier application was filed with the Office which, for the purposes of the present international application, is the receiving Office, the applicant may, *against payment of the required fee*, ask the following:☒ the receiving Office is hereby requested to prepare and transmit to the International Bureau a certified copy of the above-mentioned earlier application/of the earlier applications identified above by the numbers (insert the applicable numbers) (1)**Box No. VII EARLIER SEARCH (IF ANY).** Fill in where a search (international, international-type or other) by the International Searching Authority has already been requested (or completed) and the said Authority is now requested to base the international search, to the extent possible, on the results of the said earlier search. Identify such search or request either by reference to the relevant application (or the translation thereof) or by reference to the search request.

International application number or number and country (or regional Office) of other application:

International/regional/national filing date

Date of request for search:

Number (if available) given to search request:

Box No. VIII SIGNATURE OF APPLICANT(S) OR AGENT


SAMUEL L. FOX

Agent for Applicant

If the present Request form is signed on behalf of any applicant by an agent, a separate power of attorney appointing the agent and signed by the applicant is required. If in such case it is desired to make use of a general power of attorney (deposited with the receiving Office), a copy thereof must be attached to this form.

Box No. IX CHECK LIST (To be filled in by the Applicant)

This international application contains the following number of sheets:

- | | | |
|----------------|-----------|---------------|
| 1. request | 4 | sheets |
| 2. description | 35 | sheets |
| 3. claims | 3 | sheets |
| 4. abstract | 1 | sheets |
| 5. drawings | 6 | sheets |
| Total | 49 | sheets |

Figure number of the drawings (if any) is suggested to accompany the abstract for publication.

This international application as filed is accompanied by the items checked below:

1. ☐ separate signed power of attorney
2. ☐ copy of general power of attorney
3. ☐ priority document(s) (see Box No. VI)
4. ☐ receipt of the fees paid or revenue stamps
5. ☒ cheque for the payment of fees
6. ☐ request to charge deposit account
7. ☒ other document (specify) Transmittal Letter, Information Disclosure Sheet, Fee Calculation Sheet

(The following is to be filled in by the receiving Office)

1. Date of actual receipt of the purported international application:

2. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:

3. Date of timely receipt of the required corrections under Article 11 of the PCT:

4. Drawings ☐ Received ☐ No Drawings

(The following is to be filled in by the International Bureau)

Date of receipt of the record copy:

1/4

460852

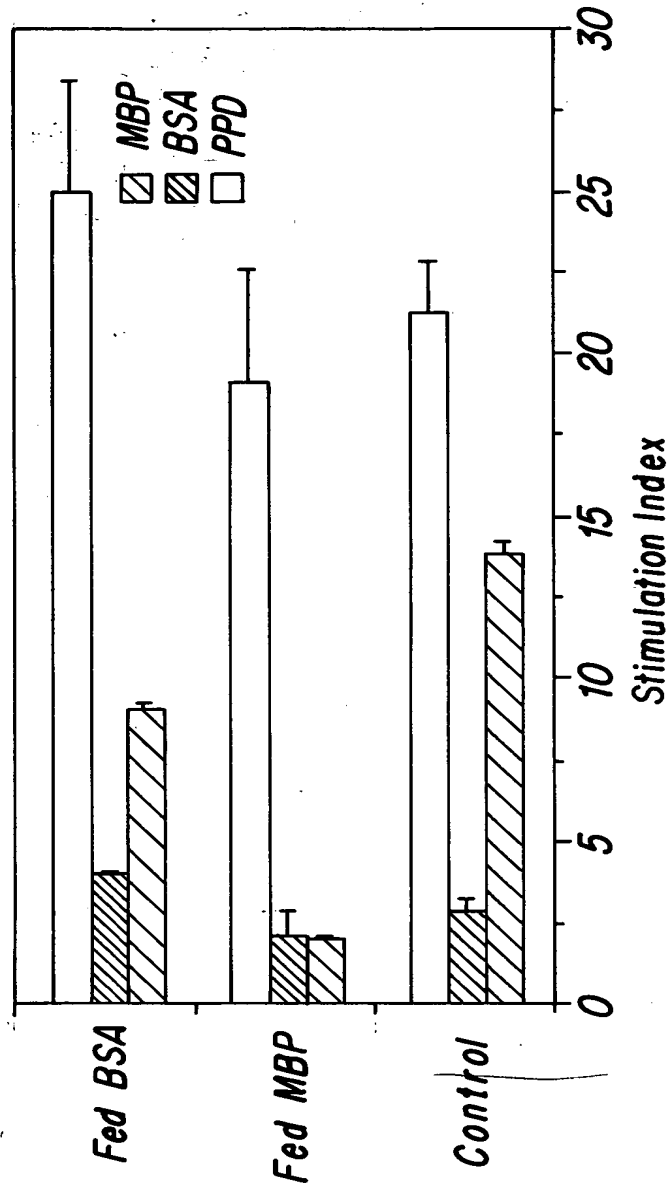


FIG. 1

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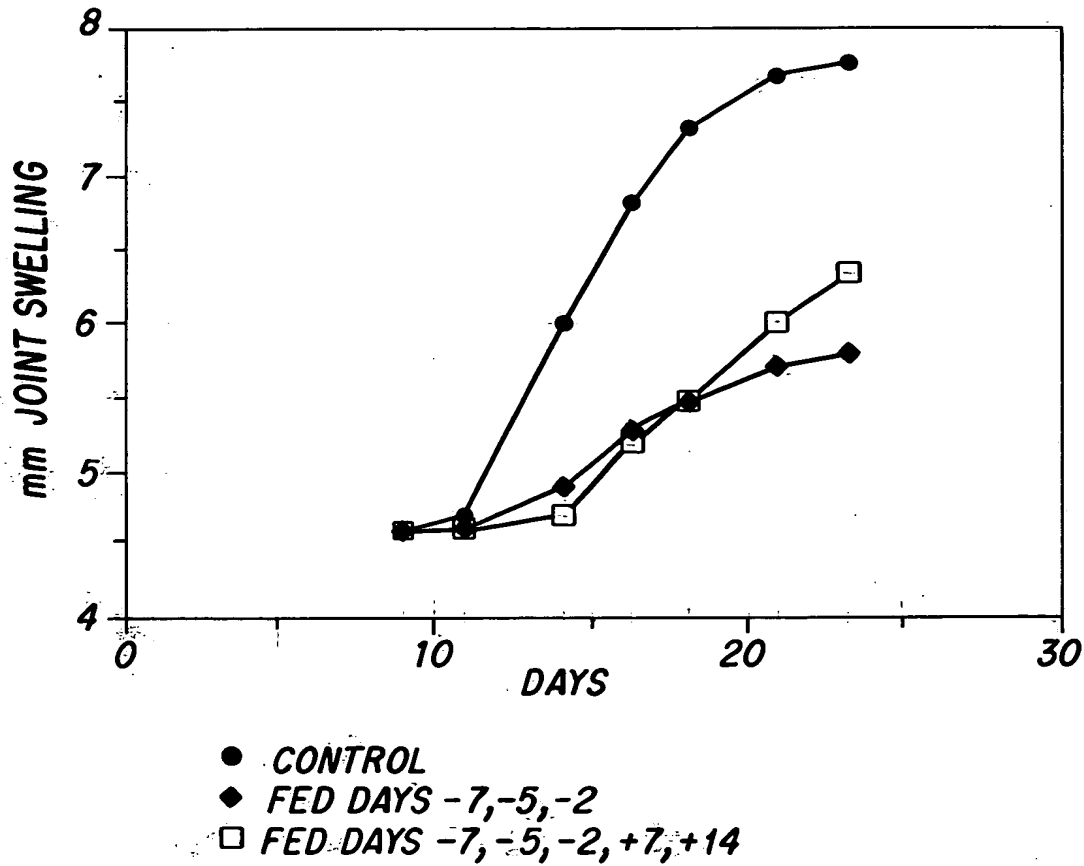


FIG. 2

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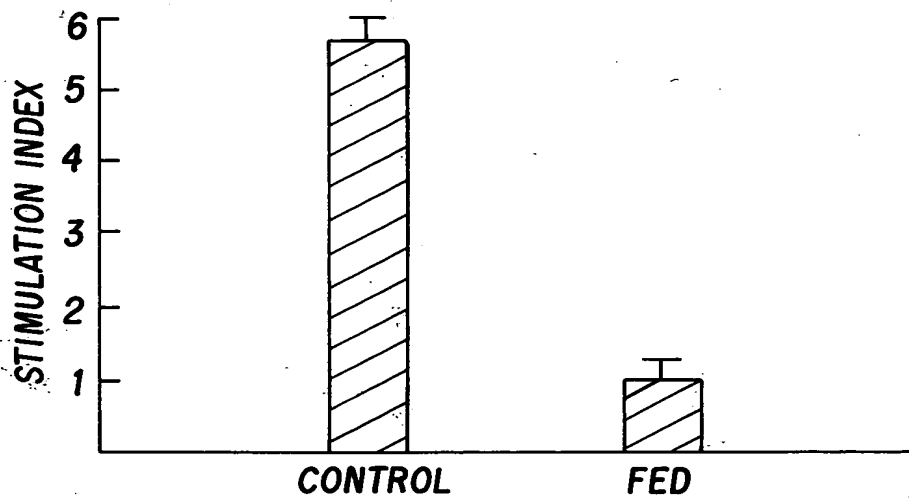
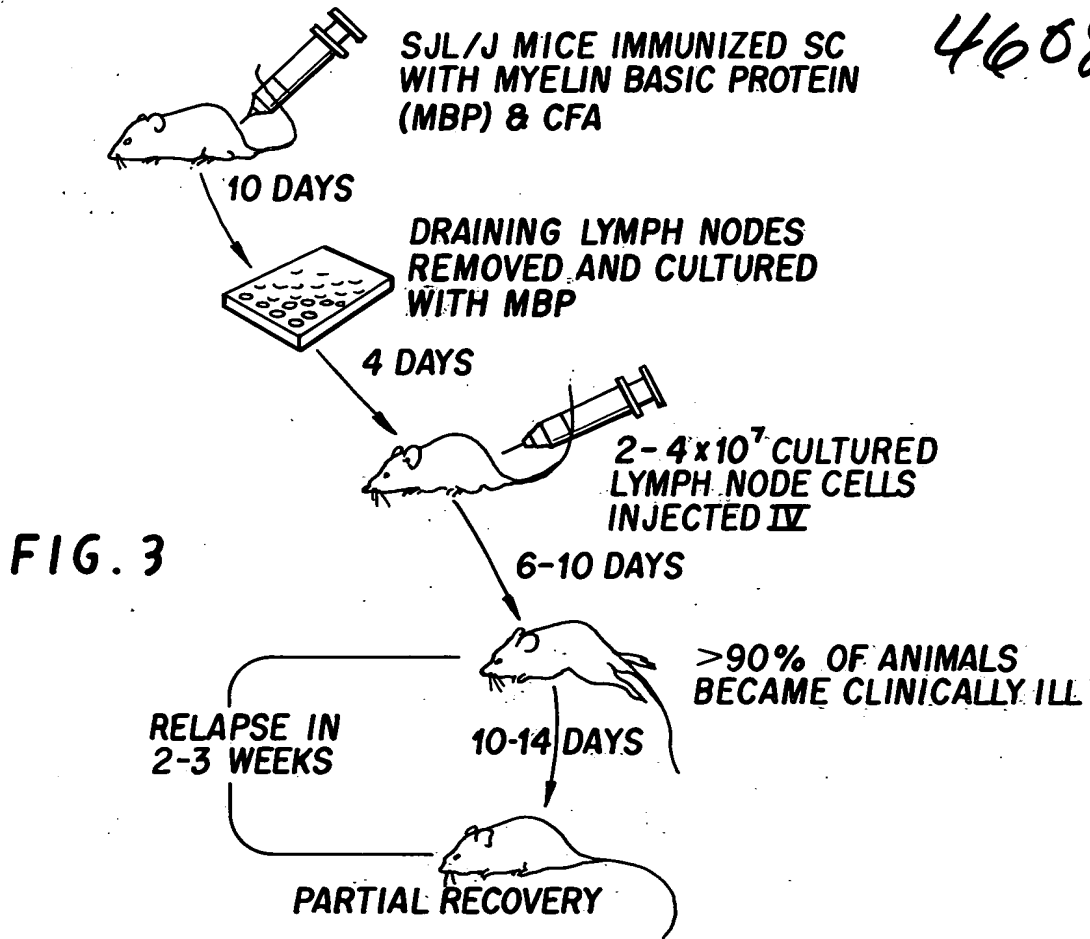


FIG. 4

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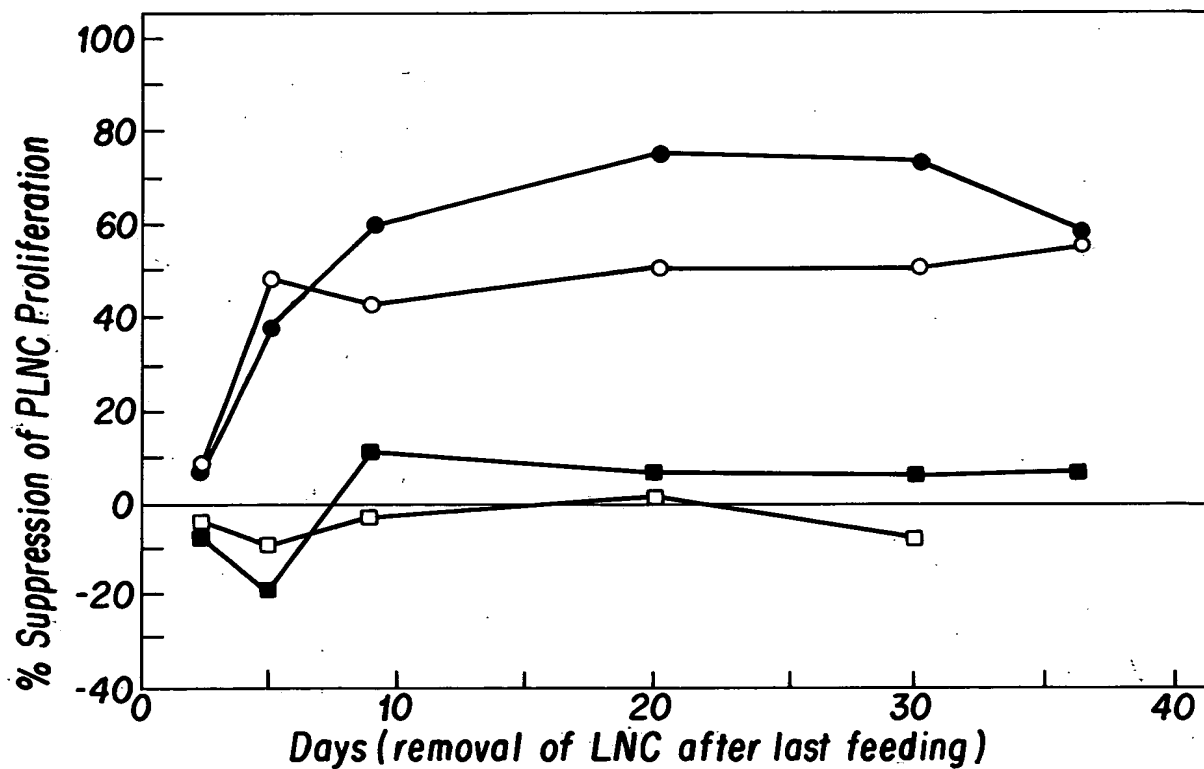


FIG. 5

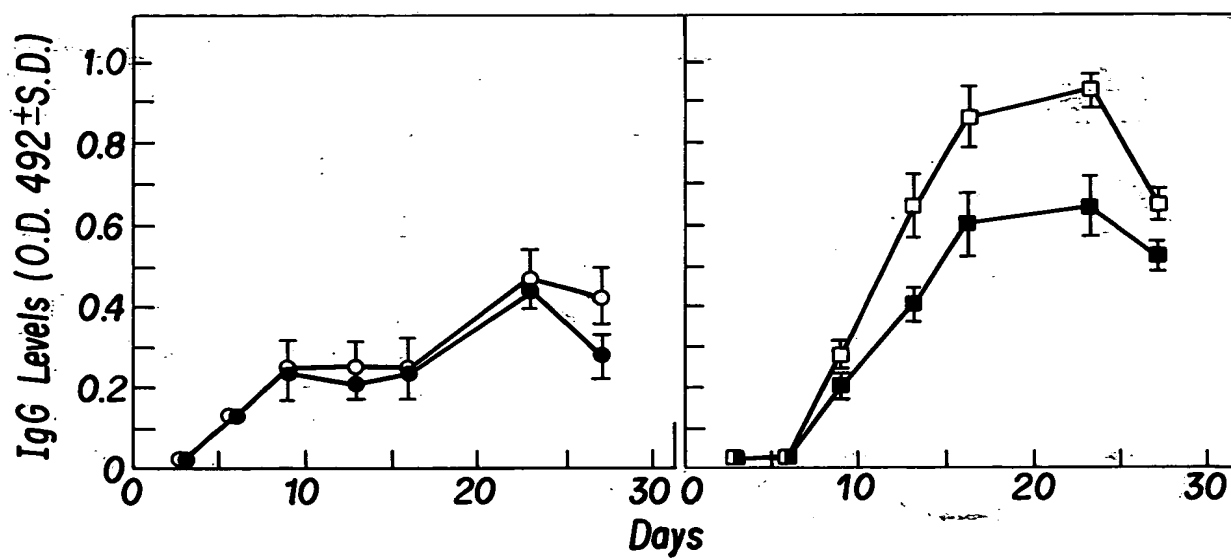


FIG. 6

PCT/US 88/02139

RO/US 21 SEP 1988

PATENT COOPERATION TREATY

APPOINTMENT OF AGENT OR COMMON REPRESENTATIVE

The undersigned applicants hereby appoint:

SAIDMAN, Perry J., Reg. No. 26,028; STERNE, Robert G., Reg. No. 28,912; KESSLER, Edward J., Reg. No. 25,688; GOLDSTEIN, Jorge A., Reg. No. 29,021; FOX, Samuel L., Reg. No. 30,353 whose address is:

SAIDMAN, STERNE, KESSLER & GOLDSTEIN
1225 Connecticut Avenue, Suite 300
Washington, D.C. 20036

as common representative to act on our behalf before the competent International Authorities in connection with the International application concerning TREATMENT OF AUTOIMMUNE DISEASE BY ORAL ADMINISTRATION OF AUTOANTIGENS (Agent's Ref: 0627.1226604), International Application No. PCT/US88/02139 filed with the U.S. Receiving Office on 24 June 1988 and to receive payments on our behalf.


HOWARD L. WEINER

Place: Boston, Mass

Date: 9/7/88


DAVID A. HAFLER

Place: Boston MASS

Date: 9/7/88